

ABSTRACT

An interconnect for a solid oxide fuel cell includes a non-ionically and non-electrically conductive ceramic gas separator plate comprising at least two ceramic layers, a plurality of first vias extending through the first separator plate ceramic layer but not through the second separator plate ceramic layer and a plurality of second vias extending through the second separator plate ceramic layer but not through the first separator plate ceramic layer. The second vias are offset from the first vias. The interconnect also includes a plurality of electrically conductive first fillers located in the plurality of first vias and a plurality of electrically conductive second fillers located in the plurality of second vias. Each of the plurality of first fillers is electrically connected to at least one second filler.